What is claimed is:

1. An immunogenic composition capable of inducing a cytotoxic response *in vitro* or *in vivo* against a viral disease through a MHC-1 restricted exogenous antigen presentation pathway without requiring viral replication, containing at least one of the compounds:

(A) a first plasmid containing a polynucleotide corresponding to the entire or a part of the viral genome and a second plasmid comprising in an insert containing a polynucleotide coding for a viral envelope (a part of the envelope or a surface protein) and being under the control of a promoter, said plasmids being selected for their fusogenic properties when binding to antigen presentation cells, and for inducing a cytotoxic response through a MHC-1 restricted exogenous antigen presentation pathway;

(B) a plasmid comprising a polynucleotide coding for the entire or a part of the virus genome and contains an insert containing a polynucleotide coding for a viral envelope (or a part of the envelope or a surface protein), and being under the control of a promoter said plasmid expressing viral particles being selected for their fusogenic non-replicative properties, and for inducing a cytotoxic response afer a CMH-2 restricted exogenous antigen presentation pathway;

(C) a virus with intact fusogenic capacities, but whose infectious capacities have been inactivated or attenuated; and

(D) viral particles obtained by the purification of a cell culture supernatant.

2. An immunogenic composition according to claim 1 wherein the viral particles obtained by the purification of a cell culture supernatant are prepared by transfecting producing cells (for example, HeLa, 293) with the plasmids according to claim 1 and purifying the supernatant, or by infecting antigen presenting cells with an HIV virus, purifying the supernatant, and inactivating or attenuating the infectious capacity of the virus.

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3. A vaccinating composition containing the immunogenic composition according to claim 2 in association with a pharmaceutically acceptable vehicle.

4. A vaccinating composition containing the immunogenic composition according to claim 2 in association with another vaccine.

5. A vaccinating composition containing the immunogenic composition according to claim 2 wherein the composition is obtained by the process of claim 16.

6. A process of treatment of a eukaryotic host suffering from a viral pathology comprising administering a plasmid comprising a polynucleotide coding for the entire or a part of the virus genome and containing an insert containing a polynucleotide coding for a viral envelope (or a part of the envelope or a surface protein), and being under the control of a promoter, said plasmid expressing viral particles being selected for its fusogenic, non-replicative properties, and for inducing a cytotoxic response after a CMH-1 restricted exogenous antigen presentation pathway.

7. A process of treatment of a eukaryotic host suffering from a viral pathology comprising coadministering a first plasmid comprising the entire or a part of the virus genome and a second plasmid comprising an insert containing a polynucleotide coding for a viral envelope (a part of the envelope or a surface

protein) and being under the control of a promoter, said plasmid being selected for its fusogenic properties, and for inducing a cytotoxic response after an exogenous antigen presentation which is MHC-1 restricted.

Sub a2

8. A process of treatment according to claim 6 or 7, wherein the virus is an human or animal retrovirus.

9. A process of treatment according to claim 6 or 7, wherein the virus is HIV-1, HIV-2, SIV, FeLV, or FIV.

10. A process of treatment according to claim 6 or 7, wherein that the host is a mammal.

11. A process of treatment according to claim 6 or 7, wherein the host is a mouse.

12. A process of stimulation *in vivo* of cytotoxic lymphocytes through an MHC-1 restricted exogenous antigen presentation pathway without requiring viral replication, comprising:

(A) administration of the plasmids contained in the immunogenic composition according to claims 1 or 2 to the host according to claim 10;

(B) optionally the cytotoxic T cells obtained after the step A above are tested in a cytotoxic test comprising:

(i) the incubation of an organ or a biologic fluid of the host containing cytotoxic T cells of the host with a synthetic peptide which sequence is encoded by a viral genome contained partly in the first or the second plasmid; or

(ii) the use of target cells with the same HLA haplotype as the host or a compatible HLA haplotype, said target cell being incubated with a synthetic peptide which sequence is a part of the sequence of an HIV-genome.

13. A process of stimulation *in vivo* of cytotoxic lymphocytes through an MHC-1 restricted exogenous antigen presentation pathway without requiring viral replication, comprising :

(A) administration of viral particles obtained by supernatant purification according to claim 2;

(B) optionally the cytotoxic T cells obtained after step A above are tested in a cytotoxic test comprising:

(i) the incubating of an organ or a biologic fluid of the host containing cytotoxic T cells of the host with a synthetic peptide which sequence is encoded by the genome contained partly in the first or the second plasmid; or

(ii) the use of target cells with the same HLA haplotype as the host or a compatible HLA haplotype, said target cells being incubated with a synthetic peptide which sequence is a part of an HIV genome.

14. A process of stimulation *in vivo* of cytotoxic lymphocytes by exogenous antigen presentation without viral replication comprising:

(A) administration of an HIV virus which infectious capacities have been inactivated or attenuated, but whose fusogenic capacities are intact according to claim 2;

(B) optionally the cytotoxic T cells obtained after the step A above are tested in a cytotoxic test comprising:

(i) the incubation of an organ or a biologic fluid of the host containing cytotoxic T cells of the host with a synthetic peptide which sequence is encoded by the viral genome contained partly in the first or the second plasmid; or

(ii) the use of target cells with the same HLA haplotype as the host or a compatible HLA haplotype, said target cell being incubated with a synthetic peptide which sequence is a part of the sequence of an HIV genome.

15. A process of treatment of an eukaryotic host suffering from a viral pathology, wherein antigen presenting cells are treated with the immunogenic composition of claims 1 to 4 then administrated back to the mammal after incubation.

16. A process of screening a composition, which is capable of inducing against a viral pathology a cytotoxic response *in vitro* or *in vivo* by exogenous antigen presentation without viral replication, wherein the cytotoxic activity of said composition is determined by the process according to claims 12 to 14.

17. A method of determining cytotoxic T lymphocyte (CTL) reponse to an antigen, wherein the method comprises:

providing viral particles containing the antigen and having a fusogenic envelope membrane;

targeting the viral particles into professional antigen presenting cells (APCs) by binding of the viral particles to the plasma membranes of the APCs and uptake of the viral particles by the APCs following fusion of the fusogenic envelope

membranes of the viral particles with the plasma membranes of the APCs, which is followed by MHC-I-restricted presentation of the antigen by the APCs without viral replication or de novo, *in situ* synthesis of the antigen in the APCs;

contacting the resulting transduced APCs with CTLs that recognize MHC-I-restricted antigen; and

determining cell cytotoxicity resulting from said contact.

18. The method as claimed in claim 17, wherein the antigen is an HIV-1 antigen and the viral particles are attenuated or inactivated HIV-1 viral particles.